

We Claim:

1. A clamp for clamping an elongate member comprising in combination:
a housing for receiving the elongate member;
a saddle member movably mounted relative to the housing;
a lever cooperating with the housing for moving the saddle member relative to the housing; and
an engaging surface for engaging the elongate member.
2. The clamp of claim 1, wherein the lever cooperates with a housing cam surface on the housing, the housing cam surface having at least two discrete surface areas.
3. The clamp of claim 2, wherein the housing cam surface defines at least two lever locking positions for engaging the elongate member.
4. The clamp of claim 1, wherein the lever is pivotably attached to the saddle member.
5. The clamp of claim 1, wherein the engaging surface is associated with the saddle member for engaging the elongate member.
6. The clamp of claim 1, wherein the engaging surface is associated with the housing. for engaging the elongate member.
7. The clamp of claim 1, wherein engaging surfaces are associated with both the saddle member and the housing for engaging the elongate member.
8. The clamp of claim 1 wherein the engaging surface is formed to engage at least a portion of a periphery of the elongate member.

9. The clamp of claim 1 wherein at least a portion of a lengthwise cross-section of the engaging surface is non-linear.

10. The clamp of claim 1 wherein at least a portion of a widthwise cross-section of the engaging surface is concave.

11. The clamp of claim 1 wherein the lever is pivotably attached to the saddle member in a slot, the slot being formed in the saddle member and having at least two distinct positions allowing the lever to pivot from at least two positions.

12. The clamp of claim 1 wherein the lever is pivotably attached to the saddle member in a slot, the slot being formed in the lever and having at least two distinct positions allowing the lever to pivot from at least two positions.

13. A clamp for clamping an elongate member comprising in combination:
a housing for receiving the elongate member;
a platen movably mounted relative to the housing;
a lever cooperating with the platen for moving the platen relative to the housing; and
an engaging surface for engaging the elongate member.

14. The clamp of claim 13, wherein the lever includes a lever cam surface having at least one facet cooperating with the platen.

15. The clamp of claim 14, wherein the lever cam surface defines at least one lever locking position for engaging the elongate member.

16. The clamp of claim 13, wherein the lever cooperates with at least a portion of a platen cam surface on the platen, the platen cam surface being nonplanar in at least a portion of its surface area.

17. The clamp of claim 16, wherein the platen cam surface defines at least two lever locking positions for engaging the elongate member.
18. The clamp of claim 13, wherein the lever is pivotably attached to the housing.
19. The clamp of claim 13, wherein the engaging surface is associated with the platen for engaging the elongate member.
20. The clamp of claim 13, wherein the engaging surface is associated with the housing for engaging the elongate member.
21. The clamp of claim 13, wherein engaging surfaces are associated with both the platen and the housing for engaging the elongate member.
22. The clamp of claim 13 wherein the engaging surface is formed to engage at least a portion of a periphery of the elongate member.
23. The clamp of claim 13 wherein at least a portion of a lengthwise cross-section of the engaging surface is non-linear.
24. The clamp of claim 13 wherein at least a portion of a widthwise cross-section of the engaging surface is concave.
25. The clamp of claim 13, wherein at least one spring suspends the platen when the lever is in an open, unengaged, position.
26. The clamp of claim 25, wherein the spring includes any number, variety and combination of coil spring, leaf spring or resilient chemical compound.

27. The clamp of claim 13 wherein the lever is pivotably attached to the housing member in a slot, the slot being formed in the housing and having at least two distinct positions allowing the lever to pivot from at least two positions.

28. The clamp of claim 13 wherein the lever is pivotably attached to the housing member in a slot, the slot being formed in the lever and having at least two distinct positions allowing the lever to pivot from at least two positions.

29. A clamp for clamping an elongate member comprising in combination:
a housing for receiving the elongate member;
a saddle member movably mounted relative to the housing;
a platen movably mounted relative to the housing;
a lever cooperating with the platen for moving the saddle member and platen relative to the housing; and
an engaging surface for engaging the elongate member.

30. The clamp of claim 29, wherein the lever includes a lever cam surface having at least one facet cooperating with the platen.

31. The clamp of claim 30, wherein the lever cam surface defines at least one lever locking position for engaging the elongate member.

32. The clamp of claim 29, wherein the lever cooperates with at least a portion of a platen cam surface on the platen, the platen cam surface being nonplanar in at least a portion of its surface area.

33. The clamp of claim 32, wherein the platen cam surface defines at least two lever locking positions for engaging the elongate member.

34. The clamp of claim 29, wherein the lever is pivotably attached to the saddle member.

35. The clamp of claim 29, wherein the engaging surface is associated with the platen for engaging the elongate member.

36. The clamp of claim 29, wherein the engaging surface is associated with the saddle member for engaging the elongate member.

37. The clamp of claim 29, wherein engaging surfaces are associated with both the platen and the saddle member for engaging the elongate member.

38. The clamp of claim 29, wherein the engaging surface is formed to engage at least a portion of a periphery of the elongate member.

39. The clamp of claim 29, wherein at least a portion of a lengthwise cross-section of the engaging surface is non-linear.

40. The clamp of claim 29, wherein at least a portion of a widthwise cross-section of the engaging surface is concave.

41. The clamp of claim 29, wherein at least one spring suspends the platen when the lever is in an open, unengaged, position.

42. The clamp of claim 41, wherein the spring includes any number, variety and combination of coil spring, leaf spring or resilient chemical compound.

43. The clamp of claim 29 wherein the lever is pivotably attached to the saddle member in a slot, the slot being formed in the saddle member and having at least two distinct positions allowing the lever to pivot from at least two positions.

44. The clamp of claim 29 wherein the lever is pivotably attached to the saddle member in a slot, the slot being formed in the lever and having at least two distinct positions allowing the lever to pivot from at least two positions.

45. A clamp for clamping an elongate member comprising in combination:
a housing for receiving the elongate member;
a saddle member movably mounted relative to the housing;
an engaging surface for engaging a the elongate member; and
means for selectively moving the saddle member relative to the housing.

46. A clamp for clamping an elongate member comprising in combination:
a housing for receiving the elongate member;
a platen movably mounted relative to the housing;
an engaging surface for engaging the elongate member; and
means for selectively moving the platen relative to the housing.

47. A clamp for clamping an elongate member comprising in combination:
a housing for receiving the elongate member;
a platen movably mounted relative to the housing;
a saddle member movable mounted relative to the housing;
an engaging surface for engaging the elongate member; and
means for selectively moving the platen and saddle member relative to the housing.

48. A clamp for clamping an elongate member comprising in combination:
a housing for receiving the elongate member; and
means for engaging a substantial periphery of the elongate member.

49. A clamp for clamping an elongate member comprising in combination:

a housing for receiving the elongate member; and
a means for engaging the elongate member in at least two positions.

50. A method of clamping an elongate member in a medical device comprising in combination the steps of:

inserting an end of the elongate member into a clamping device; and
applying a clamping force to the elongate member using the clamping device
and in so doing, engaging a periphery of the elongate member.

51. A method of clamping an elongate member in a medical device comprising in combination the steps of:

inserting an end of the elongate member into a clamping device; and
applying a clamping force to the elongate member through a saddle member.

52. A method of clamping an elongate member using a medical device comprising in combination the steps of:

inserting an end of the elongate member into a clamping device; and
applying a clamping force to the elongate member through a platen.

53. A method of clamping an elongate member using a medical device comprising in combination the steps of:

inserting an end of the elongate member into a clamping device;
applying a clamping force to the elongate member by moving a lever to a first engaging position; and
applying a second clamping force to the elongate member by moving the lever to a second engaging position.

54. A method of clamping an elongate member in a medical device comprising in combination the steps of:

inserting an end of the elongate member through the body of a cable tensioner and clamping device housing;

applying a clamping force to the elongate member using the clamping device and in so doing, engaging a periphery of the elongate member; and

using the cable tensioner to apply tension to the elongate member.

Continuation-in-Part Patent Application